

## REMARKS

Claims 27-49 are pending in this application. Claims 50-52 have been withdrawn. In the Office Action mailed October 19, 2008 (the "Office Action"), the Examiner rejected claims 26-49. Applicants have carefully reviewed and considered the Office Action. Claim 1 has been amended to more distinctly point out and claim the subject matter of the invention. Support for this amendment is found at col. 2, ¶ 0013 of the published application. In response to this Office Action, Applicants request reconsideration of the patentability of claims 27-49, as amended. It is believed that the claims are in condition for formal allowance, and, accordingly, allowance of all claims is courteously solicited.

### A. THE REJECTION OF CLAIMS 27-49 UNDER 35 U.S.C. §102(B) BASED UPON U.S. PATENT 6,235,657

In the Office Action, the Examiner argues that U.S. Patent 6,235,657 (the "'657 patent") issued to Schöps discloses all aspects of claim 1 of the present invention in that it discloses a multi-layer fibrous structure where a central reinforcing fabric sheet has at least one layer of a randomly distributed strand layer spunbonded or hydroentangled thereon. The Examiner further deemed, without explanation or proof, the subject matter of all 22 dependent claims pending in the application to be inherent in the prior art. Applicants respectfully disagree with the Examiner's position and believe that the invention as set forth in claim 1 is patentable.

The '657 patent teaches a dimensionally stable laminate structure useful for forming bitumen sheets. More specifically, the '657 patent teaches the use of two or more spunbond polymer webs sandwiching a laid glass layer of woven reinforcement. The ratio of spunbond polymer layers, preferably polyester layers, to laid glass layers is N to N-1. The '657 laminate structure comprising spunbond polymer webs is intended to overcome the cracking and warping problems inherent in glass laminates used in bitumen sheet applications. Accordingly, improved thermal and dimensional stability purportedly is improved by the use of polyester spunbond webs coupled with a central layer of glass reinforcements yarns laid in a grid arrangement.

By contrast, the fibrous structure of the subject invention comprises a central layer of randomly distributed continuous glass strands, not spunbond, melt-spinnable polymer webs. The

continuous strand layer of the present invention imparts thickness and deformability to the structure, while also adding reinforcing properties. The essential function of this layer is to give thickness and improved permeability, thus permitting better wetting of the structure with resins in composites manufacturing and molding processes. This central continuous strand layer is disposed between at least one reinforcing fabric layer of any construction or structure, which imparts strength to the resulting composite.

Consequently, the '657 patent teaches away from the subject invention. The '657 patent teaches a laminate comprising a central glass grid reinforcing layer sandwiched in the middle of two polymer spunbond layers to reduce warping and cracking of bitumen sheeting. The subject invention teaches a composite comprising a central layer of randomly distributed glass fibers, imparting improved permeability and thickness, adjoined by one or more outer glass reinforcing layers. Thus, the reinforcing members of the present invention are disposed exterior of the central permeable layer of randomly distributed fibers. Accordingly, it is clear that claim 1 of the subject application distinguishes over this cited art and should be allowed. Claims which depend from claim 1 and are rejected on the same grounds, are equally allowable for the same reasons.

**B. THE REJECTION OF CLAIMS 27-49 UNDER 35 U.S.C. §102(b) BASED UPON  
EP 0872206**

In the Office Action, the Examiner argues that EP 0872206 (the "EP '206 patent") to Shizuno discloses all aspects of claim 1 of the present invention in that it discloses a multi-layer fibrous structure where a central reinforcing fabric sheet has at least one layer of a randomly distributed strand layer spunbonded or hydroentangled thereon. The Examiner further deemed, without explanation or proof, the subject matter of all 22 dependent claims pending in the application to be inherent in the prior art. Applicants respectfully disagree with the Examiner's position and believe that the invention as set forth in claim 1 is patentable.

The EP '206 patent is directed to a dust-collecting cleaning sheet comprising an overlay of ultra fine fibers on a network sheet or perforated film and unitizing these layers by

entanglement of the fibers with the network sheet. The fibers of the cleaning sheet are comprised of ultra fine polyolefins in the range of 0.8 denier or less.

By contrast, the fibrous structure of the subject invention comprises a central layer of randomly distributed continuous glass strands. The continuous strand layer of the present invention imparts thickness and deformability to the structure, while also adding reinforcing properties. The essential function of this layer is to give thickness and improved permeability, thus permitting better wetting of the structure with resins in composites manufacturing and molding processes. This central continuous strand layer is disposed between at least one reinforcing fabric layer of any construction or structure, which imparts strength to the resulting composite.

The entangled fibrous dust-collecting sheet of the EP '206 patent does not disclose the layered, bonded reinforcing structure of claim 1 of the subject invention. EP '206 does not disclose a reinforcing composite structure at all. Accordingly, it is clear that claim 1 of the subject application distinguishes over this cited art and should be allowed. Claims which depend from claim 1 and are rejected on the same grounds, are equally allowable for the same reasons.

C. THE REJECTION OF CLAIMS 27-49 UNDER 35 U.S.C. §102(b) BASED UPON  
DE 19608378

In the Office Action, the Examiner argues that DE 19608378 (the "DE '378 patent") issued to Schierz discloses all aspects of claim 1 of the present invention in that it discloses a multi-layer fibrous structure where a central reinforcing fabric sheet has at least one layer of a randomly distributed strand layer spunbonded or hydroentangled theron. The Examiner further deemed, without explanation or proof, the subject matter of all 22 dependent claims pending in the application to be inherent in the prior art. Applicants respectfully disagree with the Examiner's position and believe that the invention as set forth in claim 1 is patentable.

DE '378 discloses a reinforcing mat comprising a soft core of plastic and a ply of textile glass fiber on either side. The plies consist of pile web formed loop knits which comprise a layer

of horizontal needle loops and a layer of vertical pile loops. The pile loop layers adjoin the core of plastic and are intermeshed with the core of plastic in the interior of the structure. The structure provides a flexible mat with abrasion-resistant outer surfaces.

By contrast, the fibrous structure of the subject invention comprises a central layer of randomly distributed continuous glass strands, not a soft core of plastic as disclosed in DE '378. The continuous strand layer of the present invention imparts thickness and deformability to the structure, while also adding reinforcing properties. The essential function of this layer is to give thickness and improved permeability, thus permitting better wetting of the structure with resins in composites manufacturing and molding processes. This central continuous strand layer is disposed between at least one reinforcing fabric layer of any construction or structure, which imparts strength to the resulting composite.

As acknowledged by the Text of the First Office Action to the priority application, DE '378 fails to disclose a central layer of randomly distributed continuous strands. Accordingly, it is clear that claim 1 of the subject application distinguishes over this cited art and should be allowed. Claims which depend from claim 1 and are rejected on the same grounds, are equally allowable for the same reasons.

D. THE REJECTION OF CLAIMS 27-49 UNDER 35 U.S.C. §102(B) BASED UPON  
WO 96/27039

In the Office Action, the Examiner argues that WO 96/27039 (the "039 publication") to Claeys discloses all aspects of claim 1 of the present invention in that it discloses a multi-layer fibrous structure where a central reinforcing fabric sheet has at least one layer of a randomly distributed strand layer spunbonded or hydroentangled thereon. The Examiner further deemed, without explanation or proof, the subject matter of all 22 dependent claims pending in the application to be inherent in the prior art. Applicants respectfully disagree with the Examiner's position and believe that the invention as set forth in claim 1 is patentable.

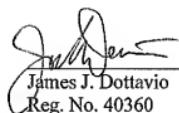
The '039 publication teaches a multi-layer glass fiber structure formed of a knitted or non-woven layer of glass fibers and an external strengthening material. The '039 publication

does not teach the use of randomly distributed continuous strands as a central layer for imparting permeability to increase wetting of resin in composite applications. Thus, a central element of Applicant's claimed invention is not disclosed by the '039 publication. Accordingly, claim 1 of the subject application distinguishes over this cited art and should be allowed. Claims which depend from claim 1 and are rejected on the same grounds, are equally allowable for the same reasons.

CONCLUSION

In summary, all of the pending claims, as amended, patentably distinguish over the prior art and should be formally allowed. Accordingly, the early issuance of a formal Notice of Allowance is earnestly solicited. Any fees required in connection with this Response may be debited to Deposit Account 50-0568. This is intended to be a complete response to the Office Action mailed October 19, 2008. The Examiner is invited to contact the attorneys listed below should any questions arise concerning this response.

Respectfully submitted,



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